
UNITED STATES AIR FORCE CCAFS/PAFB Preparing Activity: AF AF-01 57 20.00 55 (October 2007)

Superseding

AF-01 57 20 (April 2006)

References are in agreement with UMRL dated October 2007

Revised throughout - changes not indicated by CHG tags

SECTION 01 57 20.00 55

ENVIRONMENTAL PROTECTION 10/07

NOTE: This guide specification covers the requirements for environment protection during construction activities.

Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable items(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification. A listing of technical proponents, including their organization designation and telephone number, is on the Internet.

Recommended changes to a UFGS should be submitted as a CCR).

PART 1 GENERAL

1.1 SUMMARY

The requirements of this Section apply to, and are a component part of, each section of the specifications.

1.2 REFERENCES

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's

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Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

45TH SPACE WING (SWI)

FAC Chapter 62-761

45 SW CCAFS Title V Permit	CCAFS Air Operating Permit 0090005, Appendices TV-3 and 4, Title V Conditions
45 SW FSTR 10-2 Vol 2	(2005) Hazardous Material Emergency Planning and Response
45 SW Guide	(2006) HazMart Guide
45 SW Lead Plan	(2005) Lead Management Plan
45 SW OPLAN 19-14	(2005) Petroleum Products and Hazardous Waste Management
45 SW OPLAN 19-16	(2005) PCB Item Control Plan
45 SW OPLAN 32-7080	(2004) Affirmative Procurement Plan
45 SW PAFB Title V Permit	Patrick AFB Air Operating Permit 0090021, Appendices TV-3 and 4, Title V Conditions
45 SW Plan 32-1052	(2005) Asbestos Management Plan
45 SWI 32-7001	(2003) Exterior Lighting Management
AIR-CONDITIONING AND RE	FRIGERATION INSTITUTE (ARI)
ARI 740	(1998) Refrigerant Recovery/Recycling Equipment
FLORIDA ADMINISTRATIVE	CODE (FAC)
FAC Chapter 40C-2	(2002) Permitting of Consumptive Uses of Water
FAC Chapter 62-210	(2005) Stationary Sources - General Requirements
FAC Chapter 62-730	(2002) Hazardous Waste
FAC Chapter 62-740	(1995) Petroleum Contact Water
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(2004) Petroleum Storage Systems

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FAC Chapter 62-762	(2004) Above Ground Storage Tank Systems							
FAC Chapter 62-770	(2005) Petroleum Contamination Site Cleanup Criteria							
FAC Chapter 62-777	(2005) Contaminant Cleanup Target Levels							
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)								
NFPA 30	(2003; Errata 2004; Errata 2006) Flammable and Combustible Liquids Code							
NFPA 30A	(2003; TIA 2003) Code for Motor Fuel Dispensing Facilities and Repair Garages							
U.S. AIR FORCE (USAF)								
AFI 23-204	(1994) Organizational Fuel Tanks							
AFI 32-7042	(2007) Waste Management							
AFI 32-7044	(2003) Storage Tank Compliance							
AFI 32-7064	(2004) Integrated Natural Resource Management							
AFI 32-7065	(1994) Cultural Resources Management Program							
AFI 32-7080	(1994) Pollution Prevention							
AFI 32-7086	(2004) Hazardous Materials Management							
U.S. NATIONAL ARCHIVES	AND RECORDS ADMINISTRATION (NARA)							
29 CFR 1910	Occupational Safety and Health Standards							
29 CFR 1926	Safety and Health Regulations for Construction							
32 CFR 989	(1999) Environmental Impact Analysis Process							
40 CFR 112	Oil Pollution Prevention							
40 CFR 261	Identification and Listing of Hazardous Waste							
40 CFR 262	Standards Applicable to Generators of Hazardous Waste							
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities							
40 CFR 370	(2006) Hazardous Chemical Reporting: Community Right-To-Know							

40 CFR 372	Specific Toxic Chemical Listings
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

UNITED STATES CODE (USC)

16 USC 470	(1968) National Historic Preservation Act
EO 11990	(1995) Protection of Wetlands
EO 11988	(1995) Floodplain Management
EO 13101	(1998) Greening the Government Through Waste Prevention, recycling, and Federal Acquisition
EO 13112	(1999) Invasive Species
EO 13148	(2002) Greening the Government Through Leadership in Environmental Management
FAR Part 23	(2002) Environment, Conservation, Occupational Safety, and Drug-Free Workplace
FAR Subpart 52.223-5	(2003) Pollution Prevention and Right-to-Know Information
FED-STD-313D	(1996) Material Safety Data, Transportation Data and Disposal Data
PUBLIC LAW 102-484	(1993) National Defense Authorization Act, Title III, Section 326
Public Law 105-312	(1998) Migratory Bird Treaty Act of 1918
Public Law 93-205	(1973) Endangered Species Act
Public Law 96-95	(1979) Archaeological Resources Protection Act
RCRA 6002	(1999) Guidance on Conducting Inspections of Federal Facilities

1.3 SUBMITTALS

NOTE: Review Submittal Description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control.

The following shall be submitted in accordance with Section 01 33 00 $\,$ SUBMITTAL PROCEDURES in sufficient detail to show full compliance with the specification:

SD-01 Preconstruction Submittals

Contractor shall submit documentation demonstrating completion of RCRA Hazardous Waste training to meet the requirements of 40 CFR 265.16, AFI 32-7042 and 45 SW OPLAN 19-14 prior to generating any waste.

Contractor shall provide a completed authorization request (AF Form 3952) (including container type and quantity in container) for each hazardous material to be incorporated into the project including an up-to-date manufacturer specific Material Safety Data Sheet (MSDS) and the estimated quantities of those materials.

Contractor shall provide a forecast of Hazardous Waste to be generated.

Contractor shall provide a Lead-Based Paint Compliance Plan if lead-based paint will be disturbed/encountered in this project.

The Contractor shall submit Certificates of Completion for the ESOH Training Network (ESOHTN) modules required. Certificates for the Prime Contractors on-site Project Manager, Project Superintendent and Environmental Manager shall be submitted at pre-construction meeting. The Subcontractors on-site Project Manager and Superintendent shall submit their ESOHTN Certificate of Completion prior to starting their designated portion(s) of the project. The Contractor and each Subcontractor doing work on this contract shall have a letter on file at the job site certifying that the required personnel have completed the training.

SD-03 Product Data

Copies of all laboratory analyses shall be provided to the Contracting Officer for transmittal to the 45 SW Environmental Section. Contractor shall provide equipment description, serial number, and location. Analyses indicating less than 50 ppm are considered non-PCB containing equipment.

Contractors shall submit to the Contracting Officer a report itemizing all GPP approved items used in the project.

Contractors shall submit to the Contracting Officer a written justification for all items on the EPA CPG list that are used but not GPP approved. Contractors shall obtain written approval from the Contracting Officer prior to use of items on the EPA CPG list that are not GPP approved. Use of non-GPP approved items without prior Contracting Officer approval may require replacement at the Contractor's expense.

NOTE: The following three paragraphs apply to Lead Based Paint. Delete if Lead Based Paint abatement is not identified.

SD-06 Test Reports

Contractor shall be responsible for sampling all wastes at the

time of generation to determine whether they are hazardous or non-hazardous. Laboratory analyses documents and results shall be submitted to the Contracting Officer for transmittal to the 45 SW Environmental Section. All laboratory analyses shall include the laboratory name, the EPA certification number, and the EPA approved method code used for the analysis.

Provide sampling and certified laboratory analysis of wastes generated by the Contractor and submit analysis results to the Contracting Officer for transmittal to the 45 SW Environmental Section.

If analysis results indicate the waste is a hazardous waste, Contractor shall submit Records of all tests on hazardous wastes to the Contracting Officer for transmittal to the 45 SW Environmental Section.

SD-07 Certificates

Contractor shall provide data indicating actual monthly quantities of hazardous material used, stored, and hazardous waste generated. Contractor shall submit copies monthly to the Contracting Officer of signed internal manifests once the Contractor has delivered hazardous waste to the designated on-site Government storage facility.

SD-11 Closeout Submittals

Contractor shall submit Certification of completion and required documentation for completion of all environmental permits prior to the final inspection.

Contractor shall complete, sign and submit Part 2 of the Green Procurement Program Certification form.

As part of the project completion requirements, the Contractor shall provide a close out HAZMAT report identifying final disposition of remaining HAZMAT to the Contracting Officer.

Contractor shall submit to the Contracting Officer a copy of the close-out form for all hazardous waste accumulation sites operated by the Contractor.

Contractor shall provide the Contracting Officer with a report itemizing all GPP approved items used in the project as a closeout submittal upon project completion.

1.4 ENVIRONMENTAL REQUIREMENTS

1.4.1 General Conditions

The Contractor shall designate an Environmental Manager who will be a single point of contact for environmental issues between the Primary Contractor, Contracting Officer, the 45 SW Environmental Section and all Subcontractors, as applicable. The responsibilities of the Environmental Manager are explained in Section 1.5, DEFINITIONS. Official discussions, requests, submittals, meetings, correspondence, etc., between the Contractor and 45 SW Environmental Section shall be conducted through the Contracting Officer.

The Contractor shall be familiar with the environmental requirements for this project and ensure all requirements are met as stipulated in the project specific environmental analysis, these Technical Specifications, applicable permit conditions, referenced regulations and/or the design drawings. With regards to the environmental analysis, the National Environmental Policy Act (NEPA) requires all Federal agencies to evaluate their actions for potential affects to the environment. Air Force compliance with NEPA is promulgated in 32 CFR 989, Environmental Impact Analysis Process (EIAP). Potential impacts are documented and actions to offset adverse impacts must be identified and incorporated into the project. This analysis is conducted by the 45 SW Environmental Section and documentation of the analysis should be included in the design package. The Contractor shall ensure the environmental documentation is included in the design package and familiarize themselves with the environmental requirements identified therein. It will be incumbent upon the Contractor to satisfactorily carry out all requirements identified in the environmental analysis documentation.

It is the Contractor's responsibility to ensure that all work to be accomplished will be in compliance with federal, state and local environmental regulations. Contractor shall perform work in strict accordance with all conditions specified in the environmental permits. The required permits shall be obtained prior to start of construction.

Environmental Permits and Certification of completion shall be prepared and submitted to the Contracting Officer where required. All requirements of the 45 SW OPLAN 19-14 (Waste Petroleum Products and Hazardous Waste Management Plan) shall be complied with.

The Contractor shall ensure all notification(s) required by any permit(s) or regulations have been made to the applicable regulatory agency through the 45 SW Environmental Section. Contractor shall acquire the approved permit application and Notice of Intent (NOI) for the FDEP/NPDES Construction permit a minimum of 48 hours prior to any ground breaking. Contractor shall provide a copy of the NOI and FDEP approval to 45 SW Environmental Section.

Should the Contractor elect to use exterior lighting to support night work at the construction site or for area security/safety lighting, the Contractor shall be required to develop a site specific Light Management Plan. Threatened and endangered sea turtles can be disoriented by artificial lighting. Therefore, all exterior lighting proposed to support this project shall be designed and installed in accordance with the 45th Space Wing Instructions 32-7001 (45 SWI 32-7001), Exterior Lighting Management dated 1 April 03. Contact the 45 SW Environmental Section for support developing the Plan.

The 45 SW has established a Soil Stockpile Area on CCAFS for the purpose of storing excess soil, gravel, limerock, asphalt millings, and similar types of construction/fill materials for potential reuse on 45 SW construction projects. Should any of these types of materials be generated during the performance of this contract, the Contractor will be required to transport those materials to the designated stockpile area off Titan III road. A similar stockpile area also exists at PAFB.

Exotic/invasive plants are a severe problem throughout Florida and on 45 SW installations. If land clearing is included in the project, the Contractor shall employ the procedures for properly removing exotic/invasive plant

species as described in the 45 SW Environmental policy for land clearing. In order to prevent introduction of additional invasive plant species, the Contractor shall ensure all vehicles and equipment brought onto 45 SW installations are free of all soil and vegetative material. It is expected that the Contractor would thoroughly wash all vehicles and equipment prior to approaching 45 SW entry gates. Trucks and equipment will be inspected upon entry to 45 SW installations by Security Forces personnel. Any vehicles or equipment suspected of containing off-site soils and/or vegetation will not be permitted access to the installation. Similarly, when relocating vehicles or equipment from one worksite to another, the Contractor shall wash the equipment on the site where it was used prior to relocation. The Contractor shall make every effort possible to prevent the spread of invasive plants from one location to another as directed by Executive Order EO 13112, Invasive Species.

Should the work on this project require the Contractor to plant grass in the form of sod, the Contractor shall acquire sod that is certified to be "weed invasive-free" and provide the certification (documentation) to the Contracting Officer. Similarly, should the project include landscape vegetation, the Contractor shall use native vegetation included in the 45 SW approved plant list, available from the 45 SW Environmental Section.

The Contractor is not permitted to bring any pesticide or herbicide on 45 SW installations without prior written approval from the 45 SW Environmental Section. If pesticide/herbicide use is approved, only chemicals included on the Armed Forces Pest Management Board's approved list shall be used. Further, the Contractor shall identify the Certified Pest Control Operator who will be applying pesticides/herbicides, submit a Plan describing all pesticide/herbicide methods of handling and application, and document all usage amounts to the Air Force for reporting to Air Force Space Command in accordance with Air Force policy. No pesticide/herbicide storage, mixing or disposal will be permitted on 45 SW property.

If any petroleum contaminated soil or underground storage tanks are discovered, work must be stopped and the Contracting Officer must be notified who will notify the 45 SW Environmental Section. The Contractor shall coordinate their activities through the 45 SW Environmental Section prior to demolishing facilities that have petroleum storage tanks in accordance with FAC Chapter 62-770 and FAC Chapter 62-777.

1.4.2 Certification

Contractor shall provide Certification of completion and required documentation for completion of all environmental permits prior to the final inspection.

1.4.3 Training

The Contractor and Subcontractors on-site Project Manager, Superintendent and Environmental Manager (as specified) shall complete the ESOHTN modules required and submit Certificates of Completion for the ESOH Training Network (ESOHTN) required for the type of work to be accomplished. The Contractor and each Subcontractor doing work on this contract shall have a letter on file at the job site certifying that the required personnel (by name and date) have completed the training.

1.5 DEFINITIONS

1.5.1 Consumer Commodity

Quantity/container purchased for normal household use.

1.5.2 Environmental Manager

Contractor shall appoint in writing an Environmental POC for the project site. The Environmental Manager shall be directly responsible for coordinating Contractor compliance with Federal, State, local, and 45 SW requirements. The Environmental POC shall, at a minimum, ensure compliance with Hazardous Waste Program requirements (including hazardous waste handling, storage, and disposal); ensure compliance with all environmental permits; ensure compliance with hazardous materials management requirements; and coordinate the remediation of regulated substances (lead, asbestos, PCB transformers, etc.). The person in this position must have adequate awareness training to accomplish the following duties; ensure proper stormwater sedimentation, erosion control and pollution prevention procedures are met; ensure waste collection, labeling, segregation and storage requirements are met; ensure all Contractor personnel are aware of Environmental POC; coordinate delivery and removal of waste containers; and maintain the required records and documentation, including environmental permit compliance.

1.5.3 Generated Hazardous Waste

Generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include but are not limited to, excess or waste thinners and solvents (i.e. methyl ethyl ketone, toluene, etc.), pesticides, and contaminated pesticide equipment rinse water.

1.5.4 Hazardous Material (HAZMAT)

Hazardous Material (HAZMAT) encompasses all items (including medical supply items) covered under the Emergency Planning Community Right-to-Know Act Toxic Release Inventory (EPCRA TRI) reporting requirements, the OSHA Hazard Communication Standard, all Class I and II Ozone Depleting Substances (ODS), and materials which can reasonably be anticipated to generate a hazardous waste. It does not include munitions. Reference FAR Part 23.301 definition in the latest version of FED-STD-313D, Tables I & II. This includes any item or chemical which is a "health hazard" or "physical hazard" as defined by OSHA in 29 CFR 1910.1200, which includes the following:

- a. Chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizes, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.
- b. Chemicals which are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water reactive; and

c. Chemicals which in the course of normal handling, use, or storage operations may produce or release dusts, gases, fumes, vapors, mists, or smoke which may have any of the above characteristics.

It also includes any item or chemical which is reportable or potentially reportable or notifiable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR 370), or as an environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right to Know (40 CFR 372-SUBPART D), which includes the following:

Chemicals which can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

A hazardous material is anything that you can spread, squirt, brush on, shake, pour, squeeze, or otherwise apply as part of your activities. Typical examples are: adhesives, sealants, oils, grease, detergents, cleaners, disinfectants, drain opener, spray/brush paints & thinners, insecticides, herbicides, fungicides, sakrete, lab chemicals, form release agents or bottles of ink (not pen refills) etc.

1.5.5 Standard Use

Product (quantity) normally purchased to service specific equipment/procedure.

1.5.6 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

1.5.7 Wetlands

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs and their protection is mandated by Executive Order EO 11990. Official determination of whether or not an area is classified as a wetland will be made by the Air Force Environmental office (45 SW Environmental Section) and relayed through the Contracting Officer.

1.5.8 Air Pollution

Prior to construction of an air pollution source, the Contractor shall first conduct a study of the air pollution source to determine whether a construction permit will be required as per FAC Chapter 40C-2 and FAC Chapter 62-210. A construction permit must be obtained from FDEP prior to construction of an air pollution source that requires one. Contractor shall prepare the construction permit application and submit it to 45 SW Environmental Section for review and submittal to FDEP. Contractor shall comply with all provisions of the existing Air Operating Permits [45 SW CCAFS Title V Permit] [45 SW PAFB Title V Permit] Appendices TV 3 and 4. The Title V Appendices contains requirements for air pollution sources

not specifically listed in the Title V Operating Permits. As an example, the permit condition requires that a construction permit be received from FDEP prior to construction of an air pollution source. Another example is the requirement to prevent the emissions of unconfined particulate matter from any emissions source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alternation, demolition or wrecking, or any industrial related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emissions.

1.5.9 Natural Resources

Resources that are naturally occurring and not man-made. These include, but may not be limited to: wildlife, plants, soil, water, etc. Natural resources also include natural habitats, landscapes, ponds, wetlands, etc., that may include a combination of resources.

1.5.10 Cultural Resources

Man-made artifacts of human occupation prior to Air Force acquisition of Cape Canaveral (1950). These include, but may not be limited to:human remains, bones (of any kind), pottery, pottery sherds, shell tools, midden soils/sites, home sites, foundations, cisterns, material scatters, trash piles, etc. Also of interest are items that would appear to be components of earlier military equipment or construction, such as pieces of explodes rockets, launch hardware, early construction, etc.

1.5.11 Environmental Analysis Documentation

The National Environmental Policy Act requires all federal agencies to evaluate their actions for potential impacts to the environment. The 45 SW uses four different types of analysis to document their evaluation of an action. These include an attachment to the Base Civil Engineers Work Request, AF Form 332; Request for Environmental Impact Analysis, AF Form 813; an Environmental Assessment (EA); and an Environmental Impact Statement (EIS). These documents will contain project specific requirements the Contractor shall perform to prevent adverse impact(s) to the environment that could result from the work identified in the contract. Analyses are conducted by, and kept on file at, the 45 SW Environmental Section.

1.6 MATERIAL HANDLING

1.6.1 Storage and Protection

Should the Contractor require a lay-down area, this requirement needs to be identified to the Contracting Officer prior to initiation of the contract. Any construction lay-down areas, material/equipment staging, vehicle parking, etc., which is not within the immediate footprint of the construction project area, would need to be evaluated for potential environmental impacts by the 45 SW Environmental Section. Should any staged material become infested with pests or attract nesting birds, the Contractor must contact the Contracting Officer, who will notify the 45 SW Environmental Section for resolution of the issue.

Contractor shall be responsible for the storage and protection of all his materials, equipment, and wastes, whether incorporated into the job or not. Hazardous Materials and Petroleum Product Containers shall be stored on an impervious surface on pallets and with proper containment in

accordance with 45 SW OPLAN 19-14. Incompatible materials shall be segregated and have separate containment systems. No materials or wastes (including wash waters) shall be discharged onto land ditches, swales, depressions, ponds, culverts, curbs, inlets or to the storm sewers, sanitary sewers, etc. without prior approval from the Contracting Officer.

Small containers of fuel shall be:

- a. Maintained in metal lockers or structures and;
- b. Stored in Underwriters Laboratories, Factory Mutual, OSHA, or NFPA approved (listed) containers labeled 'Flammable Keep Fire Away'

Flammables or any other volatile material shall not be stored or left overnight in any building, facility, or structure other than the locker. They must be removed at the end of each day and stored in an area designated by the Contracting Officer and the [CCAFS][PAFB] Fire Prevention Section or removed from the installation.

Stored containers shall remain closed at all times while in storage. All containers shall be properly labeled. Leaking containers shall be immediately addressed by either pumping the contents of the container into another container or overpacking the container and properly cleaning up and disposing of the spilled material.

Flammable storage lockers or structures shall be located at least 50 feet from other buildings.

Wiping rags, drop cloths, paint brushes, and rollers shall be stored in covered metal containers at the end of each working day.

When floor finishes containing combustible or flammable liquids are used, all source of ignition will be eliminated and the area well ventilated.

1.6.2 Spill Prevention, Control and Countermeasure (SPCC)

Contractor shall provide Spill Prevention Plan to Contracting Officer for dealing with potential spills from drums, cans, etc. The Spill Plan must also address portable equipment like generators, tanks, lighting, HVAC units, etc. If the Contractor does not have a Spill Prevention Plan, they shall use the 45 SW plan located in the 45 SW FSTR 10-2 Vol 2.

1.6.3 Procedures for Hazardous Material Management and Authorization

Contractor shall comply with requirements of EO 13148, FAR Subpart 52.223-5 and procedures for Hazardous Material Authorization which shall be in accordance with AFI 32-7086, 45 SW Guide and AF Form 3952 (located at the end of this section). Contractor shall contact the 45 SW Environmental authorization/tracking.

Contractor shall ensure compliance with these requirements by his employees and Subcontractors.

Contractors who supply their own hazardous material (HAZMAT) for use in the performance of their contracts, shall obtain authorization prior to bringing HAZMAT on to 45th Space Wing Installations in accordance with AFI 32-7086, Hazardous Materials Management. Contractors shall submit a HAZMAT Authorization Work Sheet, with the required supporting documentation, including an up-to-date manufacturer's specific Material

Safety Data Sheet (MSDS) and estimated quantities for the work as required by Section 01 33 00 SUBMITTAL PROCEDURES to the Contracting Officer (CO).

Should Contractor HAZMAT requirements change during the contract performance period, the HAZMAT requirement changes shall be resubmitted as required by Section 01 33 00 SUBMITTAL PROCEDURES to the Contracting Officer for approval (as stated above). This procedure shall be completed prior to introducing a new (not previously identified HAZMAT) or increasing quantities of a previously identified HAZMAT, onto the installation.

All Ozone Depleting Substance (ODS) acquisitions and usage shall be obtained and tracked through the 45 SW HAZMAT Pharmacy (321-494-9663). All Class I ODS required for contract performance shall have Senior Acquisition Officer (SAO) approval (approved Air Force Form 3953) and an approved Air Force Form 3952, Chemical/Hazardous Material Authorization Request prior to contract NTP being issued. Excess existing Class 1 ODS disposition shall be processed through the HazMart Pharmacy.

1.6.4 Cleanup and Disposal

Management and disposal of any materials or non-hazardous wastes and any cleanup of contaminated property shall be in accordance with federal, state, county and applicable Air Force regulations at no additional cost to the Government. Hazardous wastes shall be managed by the Contractor in accordance with 40 CFR 262 and FAC Chapter 62-730 at the Contractor's expense, and shall include the following at a minimum:

- a. Management of one or more hazardous waste accumulation sites.
- b. Provide portable fire extinguishers, eyewash stations and required signs for each hazardous waste accumulation site.
- c. Provide appropriate Department of Transportation (DOT) containers for storing hazardous wastes.
- d. Properly mark and label container.
- e. Perform and document required weekly hazardous waste accumulation site inspections.
- f. Provide spill equipment.
- g. Provide drum handling equipment.
- h. Provide sampling and certified laboratory analysis of wastes generated.
- i. Submit analysis results to the Contracting Officer.

- j. Request hazardous waste disposal services through the Contracting Officer for hazard determination.
- k. Prepare internal manifest and deliver the drums of hazardous waste to the designated on-base storage facility within timeframes specified by the Government.

Locations of accumulation sites shall be approved by the Government prior to generating hazardous waste. Contractor shall provide enclosed, lockable storage for hazardous waste containers. The Prime Contractor shall be responsible for ensuring Subcontractors are in compliance with all hazardous waste requirements.

[Contractor shall be responsible for the off-site disposal of solid non-hazardous waste. Contractor shall assume all liabilities for improper disposal. Disposal of any liquid non-hazardous wastes to the CCAFS sewage treatment facilities must be approved by the Contracting Officer and coordinated with the Wastewater Treatment Plant.]

[Disposal of any wastes or material to the Base sewage treatment system must be approved by the Contracting Officer in writing and coordinated with 45 SW Environmental Section. Management and disposal of any materials or non-hazardous wastes and any cleanup of contaminated property shall be in accordance with federal, state, county and Air Force regulations at no additional cost to the government. Hazardous wastes shall be managed by the Contractor in accordance with 40 CFR 262 and FAC Chapter 62-730 at the Contractors expense, and shall include the following at a minimum: management of one or more hazardous waste accumulation sites; provide portable fire extinguishers, eyewash stations and required signs for each hazardous waste accumulation site; provide appropriate Department of Transportation (DOT) containers for storing hazardous wastes; properly mark and label containers; perform and document required weekly hazardous waste accumulation site inspections; provide spill equipment; provide drum handling equipment; provide sampling and laboratory analysis of wastes generated; submit analysis results to the Contracting Officer for transmittal to the 45 SW Environmental Section; request hazardous waste disposal services through the Contracting Officer for hazard determination; prepare internal manifest and deliver the drums of hazardous waste to the designated on-base storage facility within timeframes specified by the Government. Locations of accumulation sites shall be approved by the Government prior to generating hazardous waste. Contractor shall provide enclosed, lockable storage for hazardous waste containers.]

[At PAFB, Contractor shall be responsible for the off-site disposal of solid non-hazardous waste. Contractor shall assume all liabilities for improper disposal.]

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NOTE:	THE	FOLLOWING	PARAGRAPH	IS	TO :	ΒE	USED	FOR		
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The Prime Contractor shall be responsible for ensuring Subcontractors are in compliance with all hazardous waste requirements.

Contractor shall submit to the Contracting Officer a copy of the close-out form for all hazardous waste accumulation sites operated by the Contractor.

1.6.5 Fire and Chemical Spills

Contractor shall notify the Base Fire Department (Dial 911 from any base phone or [321-867-7911 from cellular phones on CCAFS)] [321-494-7642 from cellular phones on PAFB)] in the event of any fire or release of any chemical into the environment, including air emissions and spills inside or outside of a building. Contractor shall comply with 45 SW FSTR 10-2 Vol 2 and also notify the Contracting Officer.

1.7 CULTURAL RESOURCES

Cultural resources on Federal lands are protected by the National Historic Preservation Act, the Archaeological Resources Protection Act, AFI 32-7065 (1994) Cultural Resource Management Program, 16 USC 470 (1968) National Historic Preservation Act and Public Law 96-95 (1979) Archaeological Resources Protection.. There are numerous cultural resource sites (both historic and pre-historic) located on various 45 SW installations. Typically, cultural resources that could be impacted by a project would have been identified during the environmental impact analysis and described in the environmental documentation, and possibly delineated on the design drawings. However, there is a possibility of an inadvertent discovery during construction activities. Therefore, the Contractor shall pay close attention to all construction activity to ensure any cultural resources discovered during performance of this contract are immediately identified to the Contracting Officer. All work must stop upon discovery of cultural resources and the Contracting Officer will notify the 45 SW Cultural Resource Manager for an evaluation. Cultural resources of concern are described in Section 1.5 DEFINITIONS.

1.8 NATURAL RESOURCES

All Natural Resources (including, but not limited to fish, wildlife, plants, soils, water, undisturbed land, wetlands, etc.) located on 45 SW property are protected from any adverse impact(s) by AFI 32-7064 (2004) Integrated Natural Resource Management. Further, there are a number of State and Federally listed Threatened and Endangered species also found on the 45 SW that are specifically protected under Public Law 93-205, the Endangered Species Act of 1973 and birds protected by the Migratory Bird Treaty Act of 1998 (Public Law 105-312). The environmental analysis conducted by the 45 SW will identify any natural resources on, or adjacent to, the project site that would need to be protected, and measures to offset any potential to adversely affect these species. Therefore, the Contractor shall be responsible for the protection of all natural resources found on the project site or any other areas of the installation that could be impacted. In addition, the Contractor is required to report any burrow opening(s) discovered/observed on or immediately adjacent to the construction site/project area to the Contracting Officer, who will notify the 45 SW Environmental Section. Contractor personnel shall be vigilant for the presence of wildlife on the site and prevent harm to any wildlife species. Harm, harassment, loss of habitat or other adverse affects to federally listed threatened or endangered species could result in litigation against the perpetrator.

1.9 CONNECTION TO EXISTING WATER OR SEWER LINES

Contractor shall obtain written approval from the Contracting Officer a minimum of 14 calendar days prior to scheduling connection to existing water or sewer lines to ensure all applicable environmental permits are obtained prior to connection.

1.10 HAZARDOUS WASTE

Contractor shall provide the Contracting Officer with documentation for completed RCRA hazardous waste training prior to generating any waste per 40 CFR 265.16 and AFI 32-7042. All individuals involved in generating waste must be properly trained. If any waste is determined to be hazardous, as defined in 40 CFR 261, the Contracting Officer must be notified immediately. All hazardous waste shall be managed IAW State and Federal regulations by the Contractor and shall be turned over to the Air Force for disposal under the Air Force's EPA identification number.

Contractor shall notify the Contracting Officer immediately if any contaminated soil, ground water or suspect debris is encountered during excavation, demolition or construction of the project.

At the pre-construction conference, Contractor shall provide a completed authorization request (AF Form 3952) (including container type and quantity in container) for each hazardous material to be incorporated into the project including an up-to-date manufacturer specific Material Safety Data Sheet (MSDS) and the estimated quantities of those materials. Contractor shall make available to the Government any information required concerning materials, processes, or application to enable the Government to determine if the waste generated by the Contractor is hazardous. Contractor shall complete and provide to the Contracting Officer, at the pre-construction conference, a forecast of hazardous waste expected to be generated. Contractor shall provide data indicating actual monthly quantities of hazardous material used, stored, and hazardous waste generated within three days. Contractor shall submit copies of signed internal manifests to the Contracting Officer monthly for transmittal to the 45 SW Environmental Section.

As part of the project completion requirements, Contractor shall provide a close out HAZMAT report to the Contracting Officer stating disposition of remaining HAZMAT.

1.10.1 Asbestos

Asbestos Containing Material (ACM) may be hazardous and requires special handling and disposal procedures. If the Contractor suspects the presence of ACM not shown on the drawings or must disturb ACM which is not part of the contract, Contractor shall immediately inform the Contracting Officer. The Contracting Officer will determine whether removal of the questionable material is required and who will accomplish the removal. Contractor shall not disturb, remove, enclose, or otherwise cause a potential asbestos fiber release.

[This project contains no known ACM. In the event ACM is found and must be removed, removal of ACM is normally accomplished by the Government through the use of a separate Asbestos Removal Contractor. However, should the Contracting Officer deem necessary, Contractor shall be tasked to perform ACM removal by issuing a change to the contract in accordance with the changes clause and all federal, state, local and Air Force requirements.]

- [ACM has been identified on the drawings in the contract area. Removal of ACM will be through the use of a separate Asbestos Removal Contractor. However, should the Contracting Officer deem necessary, Contractor shall be tasked to perform ACM removal by issuing change to the Contract in accordance with the changes clause and all federal, state, local and Air Force requirements.]
- [ACM has been identified in the contract work area. Removal of the ACM is included in the Contract as shown on the plans and in the specifications. Contractor shall comply with all Federal, State, Local Regulations and 45 SW Plan 32-1052 concerning the removal and disposal of asbestos containing materials and the protection of all personnel working in and around the worksite. All asbestos abatement Contractors and their employees must have current Florida Asbestos Abatement Contractor Licenses to perform the work. Florida does not have reciprocity with any other state; therefore, no other license except for a current Florida license is acceptable. Workers must renew their licenses each year and the license must be current for the duration of the project.]

[Contractor shall not proceed with asbestos abatement until:

- a. 10 day notification has been completed to FDEP (if required): The notification must accurately reflect the proposed work, it must have accurate dates for the beginning and end of the project and it must be updated as needed to reflect actual schedules
- b. Contractor has an approved Asbestos Abatement Plan; [approval for CCAFS projects shall be provided by 45 SW Environmental Section] [approval for PAFB project shall be provided by 45 ADOS/SGGB (Bioenvironmental Engineering)]. Additionally, Contractor shall submit to the state of Florida disposal weight tickets (provided from the CCAFS landfill at the time of disposal) to prove that asbestos has been properly disposed.]

Contractor shall not use any materials containing asbestos and shall be liable to the Government for all costs incurred to clean up, handle, remove and dispose of any ACM resulting from Contractor's actions or non-actions that do not comply with the requirements of this section.

1.10.2 Heavy Metals in Paint and Coatings

- [Lead-based paint has not been identified in the contract work area. If the Contractor suspects the presence of lead-based paint not shown on the drawings or must disturb lead-based paint which is not part of the contract, Contractor shall immediately inform the Contracting Officer. The Contracting Officer will determine whether removal of the questionable material is required and who will accomplish the removal.]
- [Lead-based paint has been identified in the contract work area. Lead-based paint removal can create potential health hazards for workers. All applicable provisions of standards and requirements listed in this specification and Occupational Safety and Health Administration requirements 29 CFR 1926.55, 29 CFR 1926.62, and 29 CFR 1926.1127 shall be observed by the Contractor. Contractor shall submit a Lead-Based Paint Compliance Plan to the Contracting Officer for approval by the Bio-environmental Engineer, 45 SW ADOS/SGGB, Patrick AFB, FL 32925, in accordance with 29 CFR 1926.62 or 29 CFR 1926.1127 as applicable. Contractor's Lead-Based Paint Compliance Plan must be approved prior to

starting work. All work shall comply with the 45~SW Lead Plan and other references identified in this section.

- [Contractor shall comply with all federal, state and local regulations concerning ambient air quality standard for lead in areas surrounding the lead paint removal operations. Removal of lead-based paint with abrasive blasting, high pressure water streams, power tools, etc. can produce emissions containing lead in excess of this standard. Air sampling for lead shall be conducted by the Contractor to ensure compliance with these and all other applicable standards. Environmental controls shall be established prior to any lead-based paint removal.]
- [Lead-based paint waste may be hazardous waste. All loose paint, paint chips, blast media and any other suspected contaminated soil residue shall be collected, containerized, and labeled. Wash and rinse water shall be containerized and sampled. Contractor shall obtain written authorization from the Contracting Officer prior to discharging process waters to sanitary sewer or grade. Wash and rinse water shall not be permitted to flow to surface waters or storm sewers. Containerized waste of all toxic metals shall be tested utilizing the Toxic Characteristic Leaching Procedure. An independent testing laboratory shall perform the testing. If analysis results indicate the waste is a hazardous waste, Contractor shall manage the waste in accordance with paragraphs titled, "Cleanup and Disposal" and "Hazardous Waste" of this section. All waste shall be managed in accordance with 45 SW OPLAN 19-14. Records of all tests on hazardous wastes shall be provided to the Contracting Office for transmittal to the 45 SW Environmental Section.]

Contractor shall not use lead-based paint and shall be liable to the Government for all costs incurred by the Government from the Contractor's failure to comply with the requirements of the contract documents, including but not limited to costs for fines and penalties and the cost to clean up, handle, remove and dispose of any lead-based paint or lead-based paint residues.

Prior to performance of any work that will result in disturbance of lead containing materials, Contractor shall have a site specific health and safety plan that indicates measures the Contractor will take to prevent exposure to workers and to adjacent, unprotected personnel. Work performed under OSHA standards 29 CFR 1926.62 and 29 CFR 1926.1127 for lead and cadmium in construction, respectively, must be overseen by an industrial Hygienist certified by the American Industrial Hygiene Association.

Contractor shall be liable to the Government for all costs incurred by the Government from the Contractor's failure to comply with the requirements of the Contract documents, including but not limited to costs for fines and penalties and the cost to clean up, handle, remove, and dispose of any lead-based paint or lead-based paint residues.

1.10.3 Ozone Depleting Chemical Limitation

NOTE: In accordance with AFI 32-7086, Chapter 4, paragraph 4.4, the Air Force will not develop or procure any new weapon or facility systems scheduled to remain in the Air Force inventory beyond 01 January 2020 that require Class II ODS in their operations or maintenance. The Air Force will not modify any existing weapon or facility systems

scheduled to remain in the Air Force inventory beyond 01 January 2020 in any manner that adds requirements for Class II ODS in their operations or maintenance. Any one of the three Air Force SAO approval authorities may grant an exception to these prohibitions. The SAO approval process for granting such an exception will be the same as described in paragraph 4.3.2 of this AFI.

In accordance with the National Defense Authorization Act for Fiscal Year 1993, Title III, Section 326 (PUBLIC LAW 102-484), Contractor shall not make use of, nor provide to the Government, any chemical, solvent, material, or any system making use of materials, classified as a Class I Ozone Depleting substance (ODS). Class I ODS's include chlorofluorocarbons (CFC's -11, -12, -113, -114, -115, -13, -111, -112, -211, -213, -214, 215, 126 and -217), carbon tetrachloride, methyl chloroform, methyl bromide, HC-140A/Methyl Chloroform, HC-10/Carbon Tetrachloride, and Halons 1211, 1301, 1202, 2402, and 1011. Contractor shall also comply with the requirements identified in Section 608 of the "Clean Air Act".

Venting of ODSs into the atmosphere is prohibited. ODSs must be recovered and recycled. ODC recovery operations must be performed by trained certified technicians using EPA approved recovery equipment. ODCs must be recovered and recycled prior to excessing containing equipment. Excessed ODC equipment must be properly disposed of. All refrigerant leaks/releases, greater than 25 lbs must be reported to [the 45 SW Environmental Section on CCAFS for CCAFS projects] [to 45 SW Environmental Section on PAFB for PAFB projects].

Contractors working with Class I ODC refrigerants shall comply with all requirements identified in this Section, paragraph entitled "Refrigerant Recovery", Chapter 4 of AFI 32-7086, Paragraph 1.6.3 of this document and Section 603 of the "Clean Air Act".

1.10.4 Refrigerant Recovery

Contact the Contracting Officer at least 5 days prior to demolition of existing AC equipment for notification of [CCAFS][PAFB] HVAC shop for refrigerant recovery. The base HVAC shop will salvage the window type AC units and will recover the Freon from the central units.

Existing refrigerant (including refrigerant in sealed coils, tubing, etc.) shall be recovered from demolished AC equipment by the base HVAC shop and shall remain the property of the Government. The existing AC system shall be pumped down to near vacuum condition by the HVAC shop. Refrigerant recovery shall be performed in accordance with ARI 740.

1.10.5 Removal, Handling and Disposal of Hazardous Material and Waste

All wastes generated by the Contractor shall be managed in accordance with all federal, state, local and installation regulations and directives. Contractor shall be responsible for sampling all potentially hazardous wastes to determine whether they are hazardous or non-hazardous. Waste

samples shall be submitted to the Government and laboratory analyses shall be provided by the Government and submitted to the Contracting Officer.

Contractor shall provide all required waste containers. All containers utilized for the management of wastes must be new and meet the Department of Transportation's performance oriented packaging requirements and be compatible with the wastes. All containers must be labeled to accurately reflect the contents. All other requirements identified in Appendix F of 45 SW OPLAN 19-14 shall be met.

Contractor shall transport any waste that is determined hazardous to Government Hazardous Waste Storage Facility as directed by the Government. Facility number and location will be provided upon waste classification. Contractor shall be responsible for the off-site disposal of non-hazardous waste. Contractor will assume all liabilities for improper disposal. Disposal of any liquid non-hazardous wastes to the CCAFS sewage treatment facilities must be approved by the 45 SW Environmental Section, Contracting Officer and coordinated with the Base Wastewater Shop.

Non-salvageable material and debris shall be removed from work areas and disposed of daily. [Contractor may use Cape Canaveral Air Force Station (CCAFS) landfill for disposal of CCAFS Construction and Demolition (C&D) debris. For quantities larger than 90 tons/day for C&D debris, the disposal should be coordinated with 45 SW Environmental Section and landfill operators through the Contracting Officer to allow for planning for the expected number of trucks per day to avoid operational issues.]

[Contractor shall use an off-site facility permitted by the State of Florida to accept the waste for disposal of PAFB Construction and Demolition (C&D) debris. Contractor shall submit a tip sheet from the landfill for each load.]

Use of CCAFS landfill is mandatory for all CCAFS and PAFB asbestos disposal per the conditions of the FDEP permits. For quantities larger than 10 cubic yards/day, the disposal shall be coordinated with 45 SW Environmental Section and landfill operators through the Contracting Officer to allow for planning for the expected number to trucks per day to avoid operational issues.

For all C&D debris going to the CCAFS landfill, the Contractor is responsible for accurately completing and coordinating the attached landfill use approval forms. An authorized Air Force Contract Monitor or a CE Representative must sign these forms. The authorization form must accompany the first vehicle working on the project number and contract number at the landfill entrance. As soon as the number of loads is exceeded, the Contract Monitor or Civil Engineering Representative must re-authorize the form.

The CCAFS Landfill is a State permitted Construction and Demolition (C&D) debris Landfill. Only refuse directly associated with construction or demolition activities will be accepted.

The hours of operation for the CCAFS landfill are 0730-1130 and 1215-1500 Monday through Friday for C&D debris. Asbestos waste is accepted from 0730-1130 and 1215-1400 only on Tuesdays and Thursdays with 24 hour notice to the landfill operator through the Contracting Officer. The landfill is closed on weekends and holidays. Landfill available days and hours are subjected to change. Contact the landfill operator through the Contracting Officer to arrange for delivery. Vehicles must check in with attendant and

be inspected prior to disposal of any material(s).

For the CCAFS landfill, concrete shall be separated from other C&D debris since concrete is disposed of at the landfill in separate cells. Concrete must be no larger than 36 inches in any direction with no more than 18 inches of protruding rebar.

Road demolition debris such as asphalt millings and chunks and lime rock are accepted by the CCAFS landfill subject to the quantity limitations of the FDEP permits. Contact Comprehensive Health Services (CHS) Environmental through the Contracting Officer for guidance.

Note that the CCAFS Landfill will **not** accept the items listed below. Disposal of these items will be coordinated with the referenced organization. Details on organizational contacts and disposal procedures will be provided by the Government at the preconstruction meeting.

- a. Polychlorinated biphenyls (PCBs); contact 45 SW Environmental Section through the Contracting Officer to arrange for drop off at Facility 44200.
- b. Garbage items of any kind; Use dumpsters or Brevard County Landfill.
- c. Paper, this includes, but is not limited to, office paper, newspapers, and magazines; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- d. Cardboard of any type; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- e. Cans or Bottles; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- f. Tires; contact CHS Environmental through the Contracting Officer for disposal guidance.
- g. Pressure Treated/Painted Wood or Lumber; use Brevard Co. Landfill.
- h. Recyclable wood, broken pallets, no bolts, not painted or treated, use appropriate CCAFS "wood recycling only" marked dumpsters.
- i. Plastic Sheeting; use Brevard Co. Landfill.
- j. Tarps; use Brevard Co. Landfill.
- k. Fluorescent Light Bulbs; contact 45 SW Environmental Section through the Contracting Officer to arrange drop off at Building 55118.
- 1. Any metal that can be salvaged; contact DRMO Yard through the Contracting Officer to arrange for drop off.
- m. Wet Paint Cans; contact CHS Environmental through the Contracting Officer for disposal guidance.
- n. Steel cable; contact DRMO through the Contracting Officer for salvage instructions.

- o. Good Pallets; use DRMO or SGS Supply, Facility 1621.
- p. Brush (land clearing) or Yard Trash; use Brevard Co. Landfill.
- q. Sludge; contact CHS Environmental through the Contracting Officer for sampling and disposal.
- r. Batteries; they should be double-wrapped or the terminals isolated with tape. Contact DRMO through the Contracting Officer for delivery of magnesium, silver, carbon zinc, and lead acid batteries. Contact 45 SW Environmental Section through the Contracting Officer to arrange for delivery of nickel cadmium, lithium, and mercury batteries at Facility 55118.
- s. Oil Filters; contact Recycling Office at PAFB to arrange for drop off.
- t. Liquid Waste of any kind; contact CHS Environmental through the Contracting Officer for disposal guidance.
- u. Aerosol Cans; contact 45 SW Environmental Section through the Contracting Officer to arrange for instruction and drop off at Facility 55118.

During the construction activities, Contractor shall be responsible for the management of the waste in accordance with 45~SW~OPLAN~19-14 and will coordinate with 45~SW~Environmental~Section the establishment of hazardous waste accumulation sites as needed.

All spills of hazardous material shall be managed in accordance with 45 SW FSTR 10-2 Vol 2, reported immediately and immediate attempts shall be made to limit the spread of such material. Call 911 from any base phone or [(321-867-7911 from cellular phones on CCAFS)] [(321-494-7642 from cellular phones on PAFB)] and the Contracting Officer to report spills, giving name, location, injuries, what and how much spilled, source, and current status. Consult MSDS sheets prior to starting work for exposures and safe handling procedures, personal protective equipment requirements, and first aid procedures.

[1.10.5.1 Disposal of Fluorescent Lamps

Contractor shall coordinate the management and disposal of fluorescent lamps, silent wall switches containing mercury and ballasts containing PCB with the 45 SW Environmental Section and in accordance with federal and state laws and Air Force regulations, and policies including 45 SW OPLAN 19-16, PCB Item Control Plan. The lamps and switches shall be managed as universal wastes. Contractor shall package fluorescent lamps, bag switches and collect ballasts and deliver them to the designated on-base storage facility at no additional cost to the Government in accordance with established base procedures as follows:

a. Lamps must not be taped or fastened to each other and should be packaged to avoid breakage.

- b. Lamps must be packaged in cardboard boxes specifically designed to ship fluorescent lamps (packages similar to new lights without the internal cardboard filler).
- c. Lamps and cardboard containers must be kept dry.
- d. All containers must be taped closed on all sides.
- e. Containers must be marked with the number of lamps in the container and the length of the lamps.
- f. Affix a universal waste label and place the following words on the label, "Spent Mercury-Containing Lamps for Recycling (DOT Non-Regulated)"
- g. Each switch must be double-bagged and sealed.
- h. The ballasts containing PCB shall be collected by the Contractor in a new container meeting the Department of Transportation's performance oriented packaging requirements (UN1A2). The container must be properly marked with a PCB label.

These packaged lamps and bagged switches must be delivered to the universal waste site as directed by the Government. Contractor shall contact the 45 SW Environmental Section through the Contracting Officer to make arrangements for delivery. [At PAFB contact the Environmental office at 321-494-7288 for instructions.]

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	NOTE: Include the following subpart only if
	electrical pothead disposal is required.

1.10.6 Removal and Disposal Of Electrical Potheads

All potheads to be removed shall be transported to 45 SW Environmental Section Facility 44200 on CCAFS. Coordinate transport with the Contracting Officer. Prior to transport, each pothead shall be completely inspected to ensure insulating compound is not leaking and packaged on a wood pallet. If there is any evidence of leaking, the pothead must be double-bagged in plastic prior to being placed on the pallet. Leaking items that are not properly wrapped will be rejected at Facility 44200 on CCAFS unless immediately corrected by the Contractor.

******	****	******	******	*****	******	******
	NOTE:	Include t	he following	subpart only	y if PCB	
	contair	ing equip	ment require	s removal.		
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1.10.7 Removal and Transportation of Electrical Equipment That May Contain PCB

Contractor shall manage all PCB in accordance with 45 SW OPLAN 19-16, PCB Item Control Plan. Contractor is responsible for determining the PCB concentration in accordance with 40 CFR 761 of dielectric fluid contained in electrical equipment effected by the contract. This determination can be made by referencing the current Air Force PCB database (maintained by 45 SW Environmental Section) and/or by sampling and testing. Note: Any item without a current (within six months) analysis or manufacture certification

on file shall be sampled by Contractor. Contractor shall be responsible for sampling all suspected PCB wastes including oils and paints/surface coatings to determine whether they contain PCBs. Copies of all laboratory analyses shall be provided to the Contracting Officer for transmittal to the 45 SW Environmental Section. Contractor shall provide equipment description, serial number, and location. Analyses indicating less than 50 ppm are considered non-PCB containing equipment. Analyses indicating greater than or equal to 50 ppm but less than 500 ppm are considered PCB-contaminated equipment. Analyses greater than or equal to 500 ppm are considered to be PCB equipment.

Equipment containing PCBs: The Contracting Officer shall be notified immediately after a piece of equipment is determined to contain PCBs (greater than the 50 ppm regulatory limit). This equipment shall be delivered to Facility 44200 on CCAFS. Contractor is responsible for the safe transportation of this equipment to Facility 44200 on CCAFS. Contractor is also responsible for off-loading this equipment into the facility. The Contracting Officer will make the necessary arrangements with the 45 SW Environmental Section to gain access into this secured facility and will provide 45 SW Environmental Section with a copy of the laboratory analyses. If the equipment has any leaks, the Contractor is responsible for repairing these prior to delivery to Facility 44200. No leaking equipment will be accepted into this facility. If a leak is severe and the item is small enough, Contractor shall over pack the electrical equipment into a container meeting the Department of Transportation's performance oriented packaging requirements (UN1A2). If this is not a viable alternative, Contractor shall be responsible for draining the dielectric fluid from the item. All liquids must be placed in proper DOT containers (UN1A1). Contractor shall provide secondary containment for the equipment when the oil is removed. All containers shall be marked with a "Contains PCBs" label and the serial number of the equipment the oil was removed from should be noted on the top of the container(s). If any oil is spilled onto the ground, immediately notify the Contracting Officer and dial 911 from any base phone or [(321-867-7911 from cellular phones on CCAFS)][(321-494-7642 from cellular phones on PAFB)] so that emergency response personnel can be dispatched. Contractor shall make every effort to contain the release while ensuring worker safety.

1.10.8 Removal, Transportation and Disposal of Non PCB Recorded Electrical Equipment

All electrical equipment determined to be non-PCB shall be transported to the Cape Canaveral AFS DRMO by the Contractor after all arrangements have been made by the Contracting Officer. The Contracting Officer will provide the necessary DD form 1348-1A for turn-in to DRMO. Contractor shall include a laboratory analysis less than six months old. DRMO must be contacted at least 48 hours prior to any items being delivered. DRMO will accept this equipment only if it is free of leaks. If the equipment has any leaks, Contractor is responsible for repairing these prior to requesting turn-in to DRMO. All leaks are to be repaired immediately after they are discovered. All oil filled cable shall be cut in ten foot lengths, palletized, and sealed at both ends to prevent leakage prior to turn-in. Cable ends shall be sealed using approved cable end sealing caps. If a leak is severe and the item is small enough, Contractor shall over pack the electrical equipment into a container meeting the Department of Transportation's performance oriented packaging requirements (UN1A2). If this is not a viable alternative, Contractor shall be responsible for draining the dielectric fluid from the item. All liquids must be placed in proper DOT containers (UN1A1). Contractor shall provide secondary

containment for the equipment when the oil is removed. All containers shall be marked with a "Non-PCB" label and the serial number of the equipment the oil was removed from should be noted on the top of the container(s). If any oil is spilled onto the ground, immediately notify the Contracting Officer and dial 911 from any base phone or [(321-867-7911 from cellular phones on CCAFS)][(321-494-7642 from cellular phones on PAFB)] so that emergency response personnel can be dispatched. Contractor shall make every effort to contain the release while ensuring worker safety. Contractor assumes full responsibility if DRMO refuses the equipment because of leaks.

1.11 LAND RESOURCES

Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Contractor shall remove stone, soil, or other materials displaced into uncleared areas.

1.11.1 Storm Water Control Declaration

- [It has been determined that this project involves the disturbance, breakage and/or movement of earth on land at a construction site encompassing a total aggregate site area of [____] acre[s].]
- [This construction site area is less than one acre and does not require coverage under a National Pollutant Discharge Elimination System (NPDES) storm water construction permit.]
- [This construction site area involves the repair and maintenance of a facility that does not change the original line and grade, hydraulic capacity or purpose of the facility site and does not require coverage under a National Pollutant Discharge Elimination System (NPDES) storm water construction permit.]

Contractor shall be responsible to monitor site activities for the potential to generate or contaminate storm water. Best management and pollution prevention practices shall be implemented during project construction, as applicable to the size and type of project. If during construction it becomes necessary to disturb more than 1 acre of land, Contractor shall immediately notify the Contracting Officer and file the necessary application and fees for NPDES permit coverage. No further land clearing activity shall be permitted until the Contracting Officer has proof that the Notice of Intent (NOI) has been filed and the necessary waiting period has been sustained.

1.11.2 Work Area Limits

Prior to commencing construction activities, Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area, which are not to be disturbed, shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be

conducted during darkness, any markers shall be visible in the dark. Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

1.11.3 Erosion and Sediment Controls

NOTE: The paragraph below must be edited to reflect the specific requirements of the project. In place of the blank brackets, enter the name of the Installation, Facility, or Project Office. If the National or State Pollutant Discharge Elimination System Permit for Storm Water Discharges from Construction Sites with over 1 acre of Land Disturbance is not required, but the project site is covered under an existing NPDES Industrial Storm Water Permit, the requirements of that permit will be added to this paragraph, shown on the drawing, and/or attached to this specification, include Section 01 57 23.00 10 STORM WATER POLLUTION PREVENTION MEASURES if SWPPP is required.

Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs) [as indicated on the drawings] [as specified in Section 01 57 23.00 55 STORM WATER POLLUTION PREVENTION MEASURES]. BMPs may include, but are not limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. [Contractor's best management practices shall also be in accordance with the [] National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP) which may be reviewed at the [CCAFS] [PAFB] Environmental Office.] [Any modifications made to the storm water pollution prevention measures for facilities or activities covered by a SWPPP will have those modifications noted (red-lined) within 24 hours on the SWPPP document kept at the site.] Any temporary measures shall be removed after the area has been stabilized.

Guidelines and training for completion of a NPDES permit and required inspections are provided at http://www.dep.state.fl.us/water/nonpoint/erosion.htm.

1.11.4 Construction Dewatering

Contractor shall discharge dewatering effluent to an area that will promote percolation to the surficial aquifer. Dewatering effluent may not be discharged to surface water. Contractor shall perform all dewatering in accordance with FAC Chapter 40C-2. When dewatering manholes, if water in the manholes appears to be storm/groundwater that has infiltrated in, then discharge to grade at the site. If water in the manhole has obvious contamination (e.g., a visible sheen) then containerize this water and pump the remainder to grade. Do not pump water into permitted storm water

retention ponds or systems, or canals, ditches, or other surface waters. Water from the manholes cannot be discharged to the Wastewater Treatment Facility (this is not a permitted activity).

It is the Contractors responsibility to be familiar with St. Johns River Water Management District (SJRWMD) criteria regarding Consumptive User Permits (CUP) for dewatering operations. It shall be the Contractors responsibility to obtain a SJRWMD CUP for this project, if required.

1.11.5 Contractor Facilities and Work Areas

Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters or leaving the construction site. Temporary excavation and embankments shall be controlled to protect adjacent areas.

1.11.6 Wetlands and Floodplains

NOTE: All wetlands on the site or adjacent to the site must be identified on the drawings and this paragraph edited accordingly. If the wetlands on site must be disturbed, the Designer is responsible for the coordination with the regulatory agencies during design for identification of Section 404 of the Clean Water Act permits whether the permit is an Individual, Nationwide, Regional, State, or Local 404 or similar permit. The Designer must coordinate any mitigation requirements for the project. If no wetlands are onsite or adjacent to the site, delete this paragraph in its entirety. Otherwise, the first sentence should normally remain intact. This will require the Contractor to be cognizant of the responsibility to protect wetlands regardless of whether they are identified on drawings or in the event site conditions have changed since design.

Contractor shall not enter, disturb, destroy, or allow discharge of contaminants into any wetlands[.] [except as authorized herein.] Contractor shall be responsible for the protection of wetlands as required of Federal Agencies by Executive Order EO 11990 and as shown on the drawings and/or required by the contract documents and the applicable environmental permits. Authorization to enter specific wetlands identified shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries. Contractor shall install protection for these resources as shown on the contract drawings and shall be responsible for their preservation during the contract.

Floodplains are described and management is promulgated by Executive Order EO 11988, Floodplain Management. Floodplain management requirements will be described in the project drawings, specifications and NEPA/EIAP documentations.

1.12 PETROLEUM STORAGE TANKS

1.12.1 Removal and Installation of Underground Storage Tanks (UST)

The installation and removal of a UST and its associated piping shall be in compliance with AFI 32-7044 and AFI 23-204, NFPA 30, FAC Chapter 62-761, FAC Chapter 62-770, FAC Chapter 62-777 and 40 CFR 112.7. The removal of a UST and its associated piping shall be in compliance with NFPA 30, FAC Chapter 62-761, 40 CFR 112.7, and FAC Chapter 62-770. If soil contamination is encountered during the removal process, the contractor shall complete the forms identified in the applicable FAC for submittal to the Contracting Officer and 45 SW Environmental Contractor for transmittal to the 45 SW Environmental Section. The 45 SW Environmental Section will approve the completed FAC forms and forward to the appropriate federal/state agency. Clean-up associated with the removal shall be in compliance with the above listed codes, and FAC Chapter 62-740. The contractor shall complete a soil and water analysis for specific pollutants if soil contamination is observed. Sampling and analyses shall be conducted by certified personnel and laboratory and in accordance with FAC Chapter 62-770. A certified closure report shall be completed as required if contamination is discovered.

A certified operator shall pump-out the UST. Disposal of the contents and sludge shall be in compliance with all regulations listed above. The waste shall be characterized to determine if it is hazardous or non-hazardous in compliance with 40 CFR 261. Associated piping shall be cut/capped and removed. If piping can't be removed, it will be cleaned, properly abandoned-in-place and grouted. Rinsates accumulated from the triple rinsing of the tank shall be analyzed prior to disposal. If analyses are acceptable, disposal through the CCAFS Industrial Wastewater Pretreatment Plant (IWWPTP) may be an option but must first be approved by the wastewater treatment plant operator and the 45 SW Environmental Section. The contractor shall make other provisions as required for disposing of non-CCAFS/PAFB petroleum related tank wastes due to DOT regulations and the inability to transport these wastes back to the CCAFS IWWPTP. The contractor shall transport and dispose of the rinsates at a certified disposal facility. The contractor shall ensure the waste is properly manifested at the time of pump-out and transportation. The contractor shall provide copies of manifests and certifications of disposal to the Contracting Officer for transmittal to the 45 SW Environmental Section. After the tank and piping are rinsed and vapor safe, they shall be stenciled with the words "triple rinsed" on two sides and transported to the DRMO yard at CCAFS accompanied by a completed DD1348-1A form. In any case, the Contractor shall use a recycling facility for disposal.

Regulated USTs are those tanks with a volume greater than 110 gallons and do not support a boiler. Notifications for a UST shall be completed thirty-five and fifteen days prior to the tank installation per FAC Chapter 62-761.400 and required documentation shall be submitted to the Contracting Officer and the 45 SW Environmental Section. The notifications and required documentations must be approved by the 45 SW Environmental Section, who will forward to the appropriate federal/state agency. Contractor shall coordinate all tank removals with the 45 SW Storage Tank Manager (321-494-9362) at PAFB.

1.12.2 Removal and Installation of Aboveground Storage Tanks (AST)

The removal of an AST and its associated piping shall be in compliance with NFPA 30A, FAC Chapter 62-762, FAC Chapter 62-770, FAC Chapter 62-777 and

40 CFR 112.7. The removal of an AST and its associated piping shall be in compliance with NFPA 30A, FAC Chapter 62-762, FAC Chapter 62-770 and 40 CFR 112.7. If soil contamination is encountered during the removal process, the Contractor shall complete the forms identified in the applicable FAC for submittal to the Contracting Officer and 45 SW Environmental Contractor for transmittal to the 45 SW Environmental Section. The 45 SW Environmental Section will approve the completed FAC forms and forward to the appropriate federal/state agency. Clean-up associated with the removal shall be in compliance with the above listed requirements and 62-740. The Contractor shall complete a soil and water analysis for specific pollutants if soil contamination is observed. Sampling and analyses shall be conducted by certified personnel and laboratory and in accordance with FAC Chapter 62-770. A certified closure report shall be completed as required if contamination is discovered. ASTs that were installed with secondary containment and have aboveground piping do not require soil or water sampling if no contamination is observed and have no recorded spill/leak history.

A certified operator shall pump-out the AST. Disposal of the contents and sludge shall be in compliance with all regulations listed above. The waste shall be characterized to determine if it is hazardous or non-hazardous in compliance with 40 CFR 261. Piping shall be cut/capped and/or removed. piping can't be removed, it will be cleaned, properly abandoned-in-place and grouted. Rinsates accumulated from the triple rinsing of the tank shall be analyzed prior to disposal. If analyses are acceptable, disposal through the CCAFS Industrial Wastewater Pretreatment Plant (IWWPTP) may be an option but must first be approved by the wastewater treatment plant operator and the 45 SW Environmental Section. The Contractor shall make other provisions as required for disposing of non-CCAFS/PAFB petroleum related tank wastes due to DOT regulations and the inability to transport these wastes back to the CCAFS IWWPTP. The Contractor shall transport and dispose of the rinsates at a certified disposal facility. The Contractor shall ensure the waste is properly manifested at the time of pump-out and transportation. The Contractor shall provide copies of manifests and certifications of disposal to the Contracting Officer for transmittal to the 45 SW Environmental Section. When the tank and piping are rinsed and vapor safe, the tank shall be stenciled with the words "triple rinsed" on two sides then they shall be transported to the DRMO yard at CCAFS accompanied by a DD1348-1A form. In any case, the Contractor shall use a recycling facility for disposal. Vaulted tanks shall be moved to a staging area for reuse by the government. Contact the 45 Space Wing Storage Tank Manager at PAFB (321-494-9362) for staging area location.

Installation of an AST shall be in compliance with AFI 32-7044 and AFI 23-204, FAC Chapter 62-762, NFPA 30A and ASTM Standards. Installation of an AST shall be in compliance with AFI 32-7044, FAC Chapter 62-762, NFPA 30A, and ASTM Standards. The AST installation shall include secondary containment to retain 110% of the tank volume. Vaulted tanks do not require additional containment. Overfill protection shall be provided during fueling operations with a spill box on the fill port and spill containment shall be available during the transfer of fuel. The AST shall have the following: level gage, screened vent pipe, grounding strap, an interstitial space monitoring device, overfill protection and a metal locking valve to contain any rainwater. Stenciling shall include volume, contents, facility number, and "No Smoking" with the lettering at least 2.5 inches in height. Stenciling shall occur on all drive-by-sides of the tank. Piping shall be coated with corrosion resistant material and identify the directional flow with arrows. The tank shall be hurricane secured.

Regulated ASTs are those tanks that are greater than 550 gallons and do not support a boiler or are over 30,000 gallons and do support a boiler. Notifications for an AST shall be completed thirty-five and fifteen days prior to tank installation in compliance with FAC Chapter 62-762.401 and required documentation shall be submitted to the Contracting Officer and the 45 SW Environmental Section. The notifications and required documentations must be approved by the 45 SW Environmental Section, who will forward to the appropriate federal/state agency. Fuel shall NOT be added to the tank until approval has been obtained from the 45 SW Environmental Section and FDEP. Coordinate all tank removals with the 45 Space Wing Storage Tank Manager at PAFB (321-494-9362). When demolishing a tank, Contractor shall ensure applicable notifications are made to Contracting Officer and 45 CES Environmental Contractor, so 45 SW Environmental Section can ensure compliance with required FDEP notifications.

PART 2 PRODUCTS

NOTE: It is the responsibility of the designer to be aware of current EPA requirements for Affirmative Procurement and to determine the suitability of an EPA designated item in the work. Level of competition, delivery time, performance requirements and price should all be considered in making the determination.

2.1 POLLUTION PREVENTION/AFFIRMATIVE PROCUREMENT

Contractor and all Subcontractors involved in this project shall comply with Air Force Green Procurement Program (GPP) requirements as described in but not limited to AFI 32-7080 and 45 SW OPLAN 32-7080. Green Procurement program is the purchase of environmentally friendly products and services (e.g., products made from recycled/recovered materials, biobased, or renewable materials and products that are energy and water efficient). Federal agencies, their Contractors and Subcontractors are required to maximize the purchase of recycled/recovered materials on the list of "EPA Designated Guideline Items" with the minimum recycled or recovered materials content whenever practicable according to RCRA 6002, EO 13101 http://www.ofee.gov/eo/13101.asp and EO 13148. The list includes, but is not limited to:

CONSTRUCTION PRODUCTS
Building insulation products
Carpet (polyester)
Carpet cushion
Cement and concrete containing:
 -Coal fly ash
 -Ground granulated blast furnace slag
 -Cenospheres
 -Silica fume
Consolidated and reprocessed latex
paint
Floor tiles
Flowable fill
Laminated paperboard
Modular threshold ramps

Nonpressure pipe Patio blocks Railroad grade crossing surfaces Roofing materials Shower and restroom dividers/partitions Structural fiberboard

LANDSCAPING PRODUCTS
Compost made from yard trimmings
or food waste
Garden and soaker hoses
Hydraulic mulch
Lawn and garden edging
Plastic lumber landscaping timbers
and posts

Detailed information on EPA GPP approved products and manufacturers providing these products is available at www.epa.gov/cpg/products.htm. Contractors shall maximize the purchase of GPP approved items; that is, items that meet the minimum recycled or recovered material content guideline. Detailed information on energy efficient products is available at http://www.energystar.gov/ and at http://www.eere.energy.gov/femp/procurement. Detailed information on water efficient products is available at http://www.epa.gov/watersense/.

2.1.1 Green Procurement Program Certification Form

Contractor shall provide the Contracting Officer with a report itemizing all GPP approved items used in the project as a closeout submittal upon project completion. Contractors shall also provide to the Contracting Officer a written justification for all items on the EPA CPG list that are used but not GPP approved.

Contractor shall complete, sign and submit part 2 of the Green Procurement Program Certification form. The Green Procurement Program Certification form will be provided by the Contracting Officer.

2.2 PARTICIPATION IN THE 45 SW RECYCLING PROGRAM

The Contractor shall participate in the recycling Program. The Contractor will contact the Qualified Recycling Program Manager (QRP) at 494-9268 or the Recycling Contractor at 494-6848 designating a collection point and requesting to be placed on the pickup schedule. The Recycling Contractor will establish a biweekly collection program at the designated collection point. The Contractor shall recycle at a minimum cardboard, all paper, shredded paper, magazines, plastic, aluminum, glass drink containers and scrap metal. Confidential company information can be shredded or destroyed.

PART 3 EXECUTION

3.1 AF FORM 3952

The Contractor shall obtain an electronic version (word.doc) of the Air Force Form 3952 from the 45 SW Environmental Section, phone 494-7288, to complete for each HAZMAT to be used on this project.

-- End of Section --